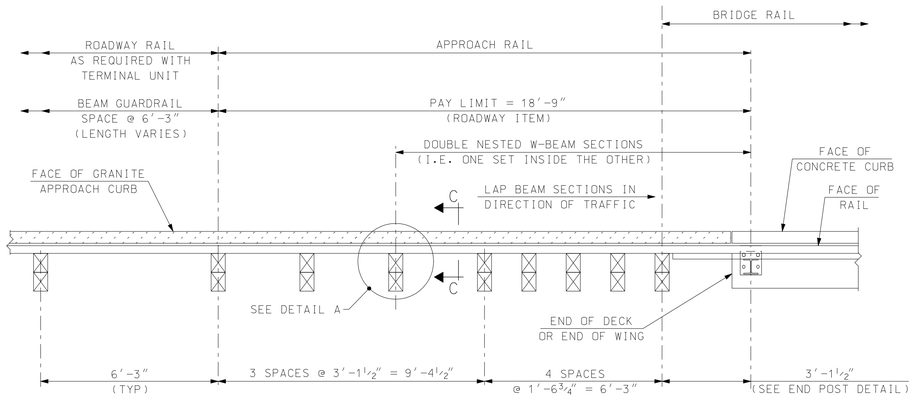
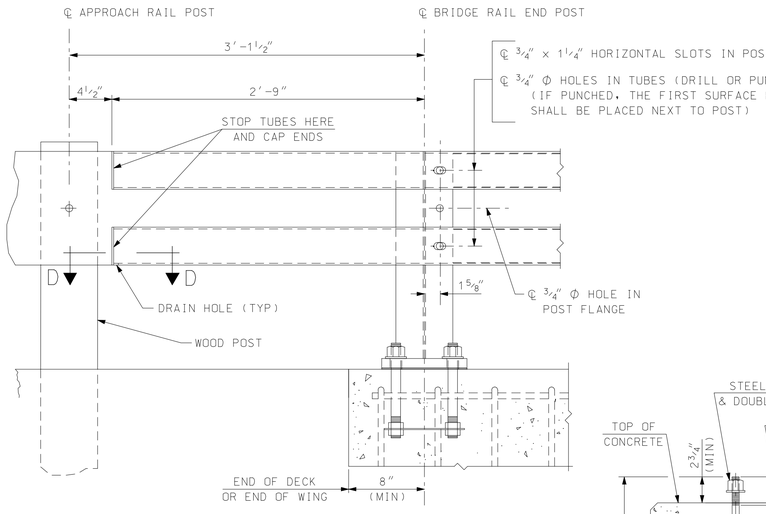


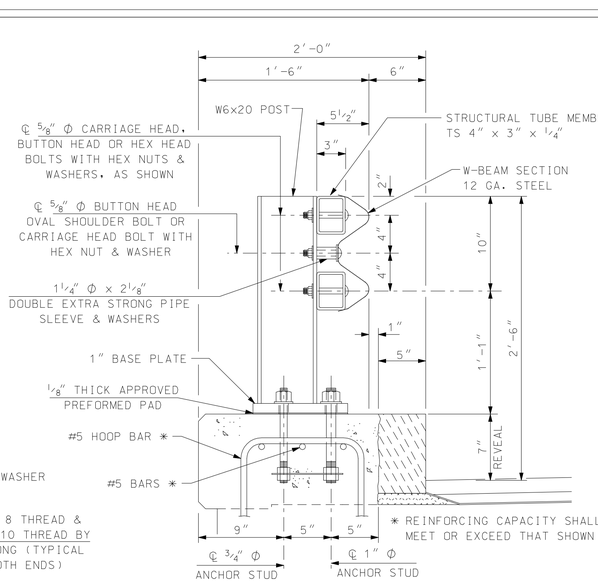
APPROACH RAIL LAYOUT

SCALE: 3/8" = 1'-0"



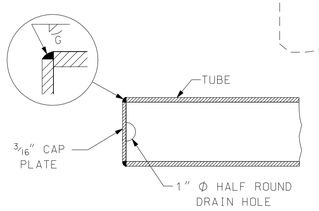
END POST DETAIL

SCALE: 1 1/2" = 1'-0"



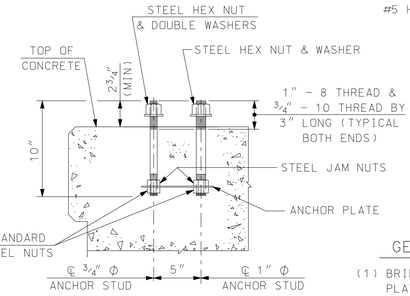
BRIDGE RAIL DETAIL

SCALE: 1 1/2" = 1'-0"



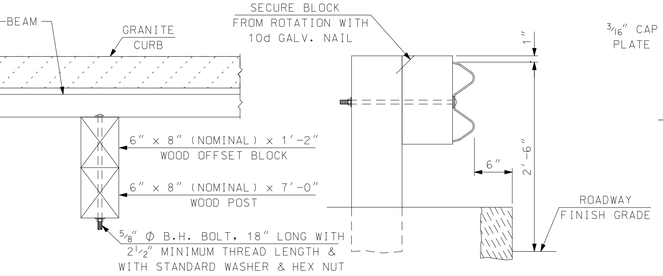
RAIL CAP DETAIL (SECTION D-D)

SCALE: 3" = 1'-0"



POST ANCHOR ASSEMBLY

SCALE: 1 1/2" = 1'-0"

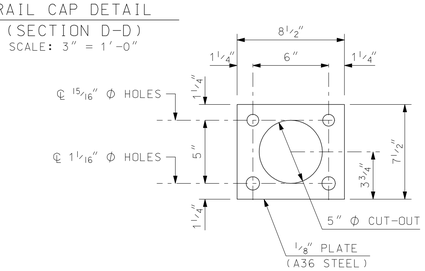


DETAIL A

SCALE: 1" = 1'-0"

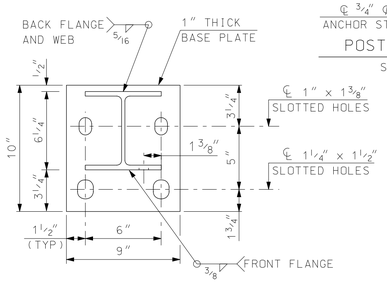
SECTION C-C

SCALE: 1" = 1'-0"



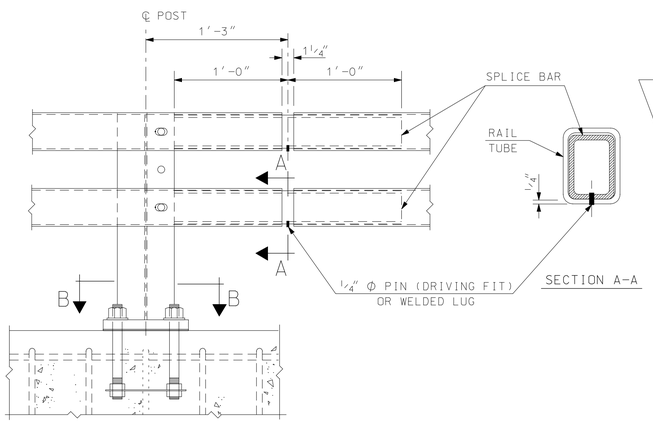
ANCHOR PLATE DETAIL

SCALE: 2" = 1'-0"



BASE PLATE DETAIL (SECTION B-B)

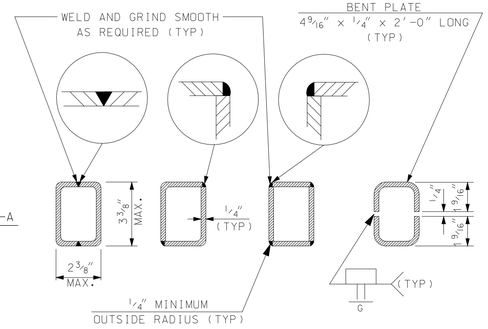
SCALE: 2" = 1'-0"



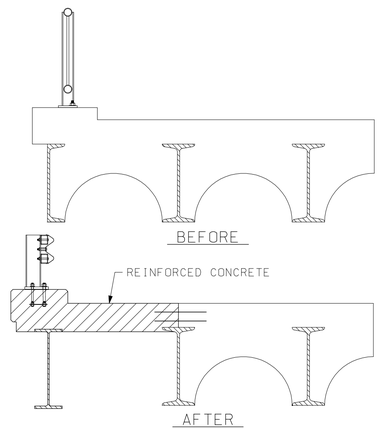
TYPICAL SPLICE

SPLICE BAR DETAILS

NOT TO SCALE



SPLICE BAR FABRICATION OPTIONS



PROPOSED DECK REPLACEMENT FOR RAIL ATTACHMENT

NOT TO SCALE

NOTE: THE DIFFERENCE BETWEEN THE OUTSIDE DIMENSIONS OF SPLICE BARS AND INSIDE DIMENSIONS OF THE RAIL SHALL BE APPROXIMATELY 1/8" (NOT TO EXCEED 3/16") ALONG EITHER AXIS TO PERMIT CLEARANCE FOR INSIDE WELD FLASH

NOTE: OTHER SECTIONS OF EQUAL OR GREATER STRENGTH ARE ACCEPTABLE FOR SPLICE BARS

GENERAL NOTES

(1) BRIDGE RAIL T101 (F), SHALL INCLUDE POSTS, BASE PLATES, ANCHOR PLATES, ANCHOR STUDS, PREFORMED PADS, RAIL ASSEMBLY BOLTS, NUTS, WASHERS, STRUCTURAL TUBING, SPLICE BARS, PIPE SLEEVES AND W-BEAM SECTIONS.
- ASTM A572 GRADE 50 : POSTS AND BASE PLATES
- ASTM A500 GRADE B : STRUCTURAL TUBING
- ASTM A36 : PIPE SLEEVES, RAIL SPLICE BARS AND ANCHOR PLATES
- ASTM A449 : ANCHOR STUDS WITH STANDARD NUTS AND HARDENED STEEL COMMERCIAL TYPE A PLAIN WIDE WASHERS
- A307 : RAIL BOLTS, NUTS, AND WASHERS
- AASHTO M180 TYPE II : W-BEAM SECTIONS

(2) ALL STEEL COMPONENTS SHALL BE GALVANIZED AFTER FABRICATION IN CONFORMANCE WITH AASHTO M232 (ASTM A153) AND AASHTO M111 (ASTM A123). GALVANIZED SURFACES SHALL HAVE A UNIFORM APPEARANCE AND GALVANIZED MATERIAL SHALL BE PROPERLY STORED.

(3) HOLES IN BASE PLATES SHALL BE FILLED FLUSH WITH ELASTOMERIC SEALANT AFTER RAIL INSTALLATION (SUBSIDIARY).

(4) STRUCTURAL TUBING SHALL BE SUPPLIED AS ONE PIECE FOR BRIDGE RAIL 40 FEET OR LESS IN LENGTH. IN OTHER CASES, TUBING SHALL BE SPLICED WITH A SPLICE BAR (SEE SPLICE BAR DETAILS). NO TRANSVERSE BUTT WELDS ARE PERMITTED ON RAIL TUBING WITHIN A CONTINUOUS LENGTH.

(5) EACH PIECE OF RAIL TUBING SHALL BE ATTACHED TO A MINIMUM OF THREE POSTS.

(6) FOR BRIDGE RAIL POST SPACING, SEE BRIDGE RAIL LAYOUT. THE MAXIMUM BRIDGE RAIL POST SPACING SHALL BE 8'-4". A POST SPACING OF 8'-4" OR 6'-3" IS RECOMMENDED WHENEVER POSSIBLE FOR USE WITH 25' SECTIONS OF THE STANDARD W-BEAM RAIL.

(7) PREFORMED BEARING PADS SHALL CONFORM TO AASHTO M251.

(8) NUTS FOR THREADED ANCHOR STUDS CONNECTING THE BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.

(9) THIS RAIL SYSTEM HAS BEEN SUCCESSFULLY EVALUATED BY FULL-SCALE CRASH TESTS TO MEET NCHRP REPORT 230 SL-2 CRITERIA (TEXAS TRAFFIC RAIL TYPE T101, REVISED 9/89).

(10) UNLESS DIRECTED OTHERWISE, USE BEAM GUARDRAIL TERMINAL UNIT TYPE EAGRT 25 FEET, ITEM 606.1455.

(GALVANIZED - 7" CURB REVEAL)

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN TOWN ROAD BRIDGES | BRIDGE NO. ---- | STATE PROJECT ----

LOCATION LOW SPEED, LOW TRAFFIC VOLUME

RURAL TOWN - T101 BRIDGE AND APPROACH RAIL

BRIDGE SHEET -- OF --

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	NHDOT		CHECKED	NHDOT	8/06
	DRAWN	GMC/PJP	8/06	CHECKED	JSZ	9/06
	QUANTITIES	---	----	CHECKED	---	---
	ISSUE DATE	9/91	FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE	10/2/06	----------		--	---

FILE NUMBER ---

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
English/BGR	TOWN-BGR	AS NOTED